

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 April 2004 (22.04.2004)

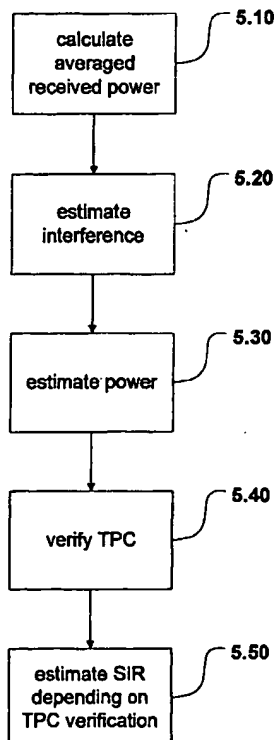
PCT

(10) International Publication Number
WO 2004/034614 A1

- (51) International Patent Classification⁷: H04B 17/00, 7/005, 1/707
- (21) International Application Number: PCT/EP2003/009208
- (22) International Filing Date: 20 August 2003 (20.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
02022734.4 11 October 2002 (11.10.2002) EP
60/418,912 16 October 2002 (16.10.2002) US
- (71) Applicant (for all designated States except US): TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE).
- (72) Inventor; and
(75) Inventor/Applicant (for US only): JONSSON, Elias [SE/SE]; Södra Promenaden 3, S-211 29 Malmö (SE).
- (74) Agent: STRÖM & GULLIKSSON IPC AB; P.O. Box 4188, S-203 13 Malmö (SE).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A METHOD AND DEVICE FOR ESTIMATING A SIGNAL TO INTERFERENCE RATIO (SIR) IN WCDMA SYSTEMS



(57) Abstract: A method and device (100) for estimating a signal to interference ratio (SIR) of a signal transmitted from a first unit and to a remotely located second unit in a Wideband Code Division Multiple Access (WCDMA) wireless communication system. The transmitted TPC (Transmit Power Control) is checked and upon this result the SIR is determined. The checking of the TPC includes the estimation of the previous and the present power using a weighted contribution of the pilots and the data.

WO 2004/034614 A1